

REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks. Claims 1, 15, and 16 are amended. The revisions to claims 1, 15, and 16 are supported, for example, at page 8, lines 10-23, and at Figure 1. Claims 1-17 are pending, with claims 1, 15, and 16 being independent.

Claim rejections - 35 U.S.C. § 102

Claims 1-6, 8-11, 14, and 15 stand rejected as being anticipated by U.S. Patent Publication No. 2002/0076161 A1 (Hirabayashi). Applicants respectfully traverse this rejection.

Independent claim 1 is directed to a light reception/emission device. A light emission device is disposed inside the optical waveguide layer without a gap. By this arrangement, contamination by flux within the optical coupling portion can be avoided. See, for example, page 2, lines 3-12. Moreover, by disposing the light emission device inside the optical waveguide layer without a gap, the device is better isolated from the external atmosphere. This isolation improves reliability by reducing the likelihood of degradation caused by, for example, humidity and/or oxidation.

Hirabayashi is directed to a waveguide-type optical device. However, Hirabayashi does not teach or suggest at least the above features. As shown clearly in Figure 1A, any device inserted into trench 1-3 is inserted with a gap between the walls of the trench. See also, paragraph 170. Thus, Hirabayashi does not teach or suggest the disposal of a light emission device inside an optical waveguide layer without a gap.

Accordingly, Applicants respectfully submit that claim 1 is allowable over the cited reference. In addition, claims 2-6, 8-11, and 14 depend from claim 1 and are believed allowable for at least the same reasons.

Independent claim 15 is directed to a method for producing a light reception/emission device. The method includes the step of filling a through hole in which the light reception device or the light emission device has been disposed with a resin without a gap.

As discussed above with respect to claim 1, Hirabayashi does not teach or suggest the disposal of a light emission device inside an optical waveguide layer without a gap. Likewise, Hirabayashi does not teach a step of filling a through hole in which the light reception device or the light emission device has been disposed with a resin without a gap.

Accordingly, Applicants respectfully submit that claim 15 is allowable over the cited reference.

Claim rejections - 35 U.S.C. § 103

Claim 12 stands rejected as being obvious over Hirabayashi. Applicants respectfully traverse this rejection.

Claim 12 depends from allowable claim 1, which is allowable over Hirabayashi for the reasons discussed above. Accordingly, Applicants therefore submit that claim 12 is also allowable over the cited reference for the same reasons as claim 1. Applicants do not concede the correctness of this rejection.

Claim 7 stands rejected as being obvious over Hirabayashi in view of U.S. Patent No. 6,574,408 (Lemaire). Applicants respectfully traverse this rejection.

Claim 7 depends from allowable claim 1, which is allowable over Hirabayashi for the reasons discussed above. Lemaire does not remedy the deficiencies of Hirabayashi. Accordingly, Applicants therefore submit that claim 7 is also allowable over the cited references for the same reasons as claim 1. Applicants do not concede the correctness of this rejection.

Claim 13 stands rejected as being obvious over Hirabayashi in view of U.S. Patent No. 5,465,315 (Sakai). Applicants respectfully traverse this rejection.

Claim 13 depends from allowable claim 1, which is allowable over Hirabayashi for the reasons discussed above. Sakai does not remedy the deficiencies of Hirabayashi. Accordingly, Applicants therefore submit that claim 13 is also allowable over the cited references for the same reasons as claim 1. Applicants do not concede the correctness of this rejection.

Claims 6, 16, and 17 stand rejected as being obvious over Hirabayashi in view of U.S. Patent No. 6,477,284 (Oda). Applicants respectfully traverse this rejection.

Claim 6 depends from allowable claim 1, which is allowable over Hirabayashi for the reasons discussed above. Oda does not remedy the deficiencies of Hirabayashi. Accordingly, Applicants therefore submit that claim 6 is also allowable over the cited references for the same reasons as claim 1. Applicants do not concede the correctness of this rejection.

Claim 16 is directed to an assembled member including a light reception/emission device. A light reception device is disposed inside the optical waveguide layer without a gap.

As discussed above with respect to claim 1, Hirabayashi does not teach or suggest the disposal of a light emission device inside an optical waveguide layer without a gap. Oda does

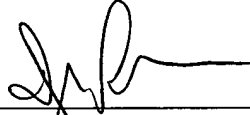
not remedy the deficiencies of Hirabayashi. Accordingly, Applicants therefore submit that claim 16 is allowable over the cited references for the same reasons as claim 1. Applicants do not concede the correctness of this rejection.

Claim 17 depends from allowable claim 16, which is allowable over Hirabayashi and Oda for the reasons discussed above. Accordingly, Applicants therefore submit that claim 17 is also allowable over the cited references for the same reasons as claim 16. Applicants do not concede the correctness of this rejection.

In view of the above, favorable reconsideration in the form of a notice of allowance is requested.

Respectfully submitted,

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